

AES PUERTO RICO, L.P.
Guayama, Puerto Rico

**August 12, 2016 NPDES Enforcement
Case Support Inspection Briefing**

Presented by:

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Facility Information

- Located on a flood plain near Las Mareas Bay
- North – TAPI; East – CPCPRC; South – wetlands and Las Mareas Bay channel; and West – AES Ilumina's photovoltaic panels complex
- Operation began in November, 2002
- Two units (525 MW – gross production; 454 MW - net production)

Facility Information (contd.)

- About 130 employees
- 84-acre site leveled above 100-year flood elevation
- Storm channel constructed to manage 100-year storm with on-site and off-site runoff -- 100-year storm (14.5 inches)
- Average rainfall for Guayama, PR is 60 inches/year (semi-arid)
- Marine cargo area located at Las Mareas Bay for limestone and coal unloading from cargo ships, and Aggremax loading into cargo ships

Aggremax

- AES generates about 30,000 tons per month
- Barge capacity is about 20,000 to 28,000 tons.

Facility Information (contd.)

- Run-on from offsite and AES (non-regulated) site collected in concrete channel that discharges into wetlands



Facility Information (contd.)

- Run-on from neighboring lands on north side is collected in underground pipeline that discharges into wetlands



Facility Information (contd.)

- Run-off from TAPI's facility is collected and discharged into wetlands side-by-side AES's Outfall 003.



Facility Information (contd.)

- AES' site stormwater runoff associated with industrial activity is collected in a stormwater collection and discharge system. AES reuses the runoff collected at SW Pond for water production prior to overflow discharge.



Discharge and Sampling Locations



SW Pond

Sampling Point 003

Coal Pile Pond

Discharge Outfall 003

Discharge/Sampling Outfall 002

The image is an aerial photograph of an industrial site, likely a power plant or coal processing facility. It features several large, dark-colored ponds and a complex of buildings with various rooflines. Yellow arrows are used to highlight specific areas of interest. One arrow points to a small pond labeled 'SW Pond'. Another points to a larger pond labeled 'Coal Pile Pond'. A third arrow points to a discharge pipe labeled 'Discharge Outfall 003'. A fourth arrow points to a larger discharge pipe labeled 'Discharge/Sampling Outfall 002'. A fifth arrow points to a location labeled 'Sampling Point 003' near the 'Coal Pile Pond'. The surrounding area includes green fields and some distant structures.

Facility Information (contd.)

- Run-off (stormwater and process wastewater) from production and material storage areas is collected and conveyed into Coal Pile Runoff Pond through swales and channels. No discharge from this Pond into wetlands. All wastewater is re-used for water production and dust control.



Sampling/Discharge Point 001



INSPECTIONS AND ENFORCEMENT

- April, 2011 - RFI (unauthorized discharge of pollutants (2-20-11) from cooling tower basin into wetlands.

- July 2011 - CEI
 - stormwater and non-stormwater without an NPDES from the Power Plant. NOI for the marine cargo facility at Las Mareas Bay.
 - Coal Pile Runoff Pond overflowed into wetlands.
 - Lack of structural and non-structural BMPs across the board.
 - Lack of maintenance to storm sewers, and SW and Coal Pile Runoff Ponds.

INSPECTIONS AND ENFORCEMENT

➤ December 2011 - ACO

- As-built Topographic Survey
- Hydrology/Hydraulic Study (H/H Study)
- Engineering and Environmental Analysis
- Water balance Analysis
- Design/Construction of structural BMPs (100-year storm)
- Monitoring SOPs, SWPPP Development & Training
- Progress Reports

BMPs' Design, Construction & Maintenance

- In May 2013, CEPD approved structural and non-structural BMPs following a series of meetings and documents reviews:
 - 31 Structural BMPs
 - 55 Non-Structural BMPs
 - AES constructed 2 additional BMPs
- CEPD inspected the construction activities in August 2013.
- Substantial completion of the construction of structural BMPs achieved in September 2013.
- AES obtained 2008 / 2016 MSGP coverage prior to permit expiration.

June 19, 2014 Inspection

- Evaluation of ash production, management and storage areas
- Evaluation of BMPs to prevent, eliminate and reduce ash migration into air and water
- Compliance determination with ACO
- **Issues found that required further enforcement**
- Closure of ACO and issuance of AOC

January 28, 2015 Inspection



Aggremax Pile



January 28, 2015 Inspection



Water Sprinklers System



➤ Compliance Requirements

- Submittal of Pending Reports (e.g., annual reports) – done
- SW Sampling SOP – done
- SW Quarterly Monitoring and Reporting – ongoing
- Final BMPs Implementation Report – done
- Plan of Action
 - BMPs for pending areas – done
 - Plan for minimization and control of dust – submitted on time but hasn't been approved
 - Submitted on June 1, 2015
 - DECA's comments on July 14, 2015
 - Postponed review and comments due to Aggremax legal cases and increase in storage
- Creation of SW Coordinator Position – done

➤ Quarterly Compliance Reports - ongoing

August 12, 2016 Inspection

➤ Minor Housekeeping Practices issues

➤ Aggremax Pile

- 180,000 removed
- Were able to excavate to 4 feet bgl
- Work had to stop
- Sprinkler system
- Truck-mounted Sweeper
- Truck-mounted water sprinklers & cannon
- Speed limit
- Wheel washing station









Proposed Next Steps

- CEPD / ORC / DECA Conference Meeting
- Conditional Approval of the Dust Control Plan
- Closure of the AOC
- Annual Inspections until Aggremax Issues are resolved / addressed